

AUTHOR INDEX TO VOLUMES 36 AND 37

AGARWAL V., 36:35 AKUNE K., 37:123 ALÉ R.M., 37:89 ALLARD L.F., 36:73 AMMANN J.J., 36:165, 36:379 ASHBEE K.H.G., 37:343 AYALA A., 37:245

BAGNALL C., 36:1 BANGWEI Z., 37:119 BENVENUTI A., 36:271 BERNDT S., 36:93 BONTEMPI P., 36:271 BOŽIĆ D., 37:53 BRETSCHNEIDER J., 36:93 BROOKS C.R., 36:73

Cabezas C., 37:187 Cao S., 36:73 Carpén L.I., 36:279 Castaing P., 36:309 Chama C.C., 37:177 Charlier J., 37:89 Chung C.Y., 37:227 Coddet C., 36:257 Colmenero J.C., 37:123 Cornwell L.R., 37:295 Corti S., 36:271

Dahms M., 36:371 Davies R., 37:131 Dhua S.K., 37:1 Dong H., 37:195

EDNIE K.H., 36:243 EDMONDS D.V., 37:301 EHRNSTÉN U.M., 36:279 EL KEDIM O., 36:159, 36:185 EMBURY J.D., 37:239

FANG H.S., 37:95 FANG J., 37:23 FERREYRA E., 37:245 FORGET C., 36:203 FRIESEN T., 36:213 FROYEN L., 36:151, 36:357 FURTADO H.C., 36:175 FURUKAWA M., 37:277, 37:285

GAFFET E., 36:185 GARCIA E.P., 37:245 GEELS K., 36:225 GIBSON E.D., 37:9 GOFORTH R.E., 37:295 GROSSMANN G., 36:235 GRUM GRUM J., 37:81 GUAN GUAN S.X., 37:183 GUANGYING Z., 36:65 GUPTA A.K., 37:61

Hartwig K.t., 37:295 Hasaka M., 36:43 Hein L.r., 36:379 Helm H., 36:93 Horita Z., 37:277, 37:285 Hsu F.-Y., 36:365, 36:371 Hsu T.Y., 37:227 Hu Z.Q., 37:183 Huang W., 37:245 Hunt J.D., 37:301

Kennedy C., 37:245 Klaar H.-J., 36:365, 36:371 Klein A., 37:143 Knutsen R.D., 37:31 Kondo N., 37:331 Kondo S.-I., 36:43 Konkol P.J., 37:195

Lahaye C.T.W., 36:191 Lang Y., 37:169 Langdon T.G., 37:277, 37:285 Laroche S., 36:203 Lemasçon A., 36:309 Le May I., 36:175 Lesage P., 36:159 Lesko A., 36:349 Li C., 36:65 Li D., 37:183 Li G.P., 37:183 Li Y., 36:27 Likonen J., 36:279 Liu Y.Y., 37:183 Lloyd D.J., 37:61 LOCKYER S.A., 37:301

MAINY D., 36:321, 36:327 MALLARD H., 36:309 MANNHEIMER W.A., 36:105 MARDER A.R., 36:35 MAROIS P.H., 37:61 MARTHINSEN K., 36:53 MARTIN J.W., 37:105 **MARTÍN-GIL F.J., 36:335** MARTÍN-GIL J., 36:335 MAYR P., 36:153 MCEVILY A.J., 36:153 MERKEL U., 37:143 MIKUTSU K., 36:43 MITKOV M., 37:53 MOHAN K., 37:161 MONTAVON G., 36:257 **MORIMURA T., 36:43** MURR L.E., 37:245

NAGANO T., 37:331 NAVARA E., 36:349 NAZAR A.M., 36:165, 36:379 NEBAUER E., 37:143 NECTOUX J.P., 36:327 NEMOTO M., 37:277, 285 NICOLETTI G., 36:235 NIOU C.-S., 37:245 NORTHWOOD D.O., 36:83

OGAWA H., 37:331 ÖSTERLE W., 37:143

Pan, C., 36:5 Pappu T.S., 37:245 Pendray A.H., 37:9 Pohl K., 36:153

QINGLONG Z., 37:119

RAHOUADJ R., 36:159, 36:185 RANDLE V., 37:131 RAY A., 37:1 REBELLO J.M.A., 37:89 RENARD D., 36:327 RESSEL P., 37:143

349

655 Avenue of the Americas, New York, NY 10010

RICCI N., 36:271 RICKERBY D.G., 36:213 RIVAS J.M., 37:245 RUCKERT M., 36:225

SAMUELS L.E., 37:211 SANCHEZ J.C., 37:245 SARABIA-HERRERO F.J., 36:335 SCHULSON E.M., 37:23 SHUCHUAN C., 37:227 SEMIATIN S.L., 37:295 SILVA F.A., 36:165 SMITH D.J., 37:285 SMITH J.L., 37:239 SOKOLOWSKI J.H., 36:83 STOYAN D., 36:93 ŠTRUM R., 37:81 STRUTT P.R., 37:161 SUN D., 36:83 SUN X.-C., 36:83 SWISHER J.H., 37:153

TACHIKART M., 36:159, 36:185 TONG X.C., 37:95 TOY S.M., 37:39 TSUREKAWA S., 37:331

UĞUZ A., 37:105 URBAN I., 37:143

VALIEV R.Z., 37:277, 285 VAN DER GRIJN A., 36:151 VANDER VOORT G., 36:151 VANDERVOORT VANDER VOORT G.F., 36:291 VARJONEN O.A., 36:279 VERHOEVEN J.D., 37:9

WAKAI F., 37:331 WANG Q.J., 37:183 WANG G.-X., 36:371 WANGYU H., 37:119 WENPU D., 37:169 WITTRIDGE N.J., 37:31 WOOD J.T., 37:239 WOUTERS R., 36:357

Xi Y., 36:11 Xuanyuan Q., 37:119

YANG J., 37:153 YAO M., 36:27 YUN M., 37:301

ZARZOUR J.F., 37:195 ZELIN M.G., 37:311 ZHANG, Z., 36:5 ZHOU R., 37:239 ZUMELZU E., 37:187 ZUOBAO F., 37:169 ZUYAO X., 37:227



SUBJECT INDEX TO VOLUMES 36 AND 37

CATEGORIES

Aluminum Alloys Archeometallurgy

Bibliography

Book Reviews, New Books

Casting Materials & Technology

Ceramics

Coatings/Platings

Composites

Copper Alloys

Corrosion

Crystallography

Damascus Steel

Diffusion Phenomena

Dispersion Hardening

Editorials

Electro-Deposition (all types)

Electroless Deposition (all types)

Equal Channel Angular Processing

Extraction Techniques

Failure Analysis

Field Metallography

Fractography

Fracture Theory/Crack Tips

Heat Treating

Image Analysis

Inclusions/Second Phase Particles

Intermetallics

Iron & Iron-Base Alloys

Lead-Tin Alloys

Life Assessment

Mechanical Alloying

Mechanical Behavior: Creep, Fatigue, Fracture,

Superplasticity

Metallic Oxides & Glasses

Metallographic Preparation/Techniques

Microindentation Hardness

Microscopu

Microstructural Characterization: CerMets

Microstructural Characterization: Intermetallics

Microstructural Characterization: Metals

Microstructural Characterization: Using Color

Modeling

Nano Grained Materials

Nano Materials

Nickel Alloys

Non-Metallic Inclusions

Organic Materials/Polymers

Oxidation, Corrosion, Environmental Interactions

Phase Diagrams/Stability

Phase Identification

Phase Transformations

Powder Metallurgy

Preparation Techniques

Quantitative Metallography

Radiation Effects

Rapid Solidification

Recrystallization

Semiconductors/Magnetic Film

Shape Memory: Alloys, Effect

Solder Joints

Statistical Analysis

Surface Hardening

Texture/Orientation

Thermal History

Titanium Alloys

Welding, Joining

X-Ray Diffraction

Zinc Alloys

Aluminum Alloys

Distribution of Al₁₂Fe₃Si and (FeAl₆)Si in a HIPed Al-10.71 wt.% Si Casting, 37:177

Evolution of Grain Boundary Structure in

Submicrometer-Grained Al-Mg Alloy, 37:285 Grain Sizing of Anodized Aluminum by Color

Image Analysis, 36:203

Influence of Microstructural Parameters on Strain Localization in Uniaxial Tension, 36:159

Micro- and Macrodefects in Thin Sheet Twin-Roll Cast Aluminum Alloys, 37:301

Microstructure Characteristics of a Rapidly Solidified Al-Si-Ti-Pb Alloy, 37:95

- Review of the Techniques for Extraction of Second-Phase Particles from Aluminum Alloys, 37:61
- Secondary Processing of Electron Backscatter Data from an Aluminum Alloy, 37:131
- Thermoelectric Power Characterization of a 2024 Aluminum Alloy During Solution Treatment and Aging, 36:83

Archeometallurgy

- Metallography of Ancient Bronzes: Study of Pre-Roman Metal Technology in the Iberian Peninsula, 37:335
- Stone-Working Axe Heads Fabricated by Convicts at an Early Australian Colony, 37:211 Wootz Damascus Steel Blades, 37:9

Bibliography

- A Bibliography of Books Relating to Materials Microscopy, 37:105
- Book Reviews, New Books 36:49, 36:51, 36:103, 37:51, 37:165, 37:237

Casting Materials & Technology

- Distribution of Al₁₂Fe₃Si and (FeAl₆)Si in a HIPed Al-10.71 wt.% Si Casting, 37:177
- Intergranular Fracture of Low-Alloy Cast Steel, 36:65 Long Period-Structure of Spin-Cast FeBSi₂, 36:43

Ceramics

Ceramics Superplasticity: Deformation Mechanisms and Microstructures, 37:331

Coatings/Platings

- High-Strength, High-Conductivity Copper-Steel Composite, 37:239
- Microstructural Examination of Layered Coatings by Scanning Electron Microscopy, Transmission Electron Microscopy, And Atomic Force Microscopy, 37:213
- Properties of Electroless Ni-W-P Amorphous Alloys, 37:119
- Quantification of Particle Morphologies in View of Quality Control of the Thermal Spray Process, 37:
- Simulation of Chromized Coating Processing and Microstructure, 36:35

Composites

- Analysis of Internal Structures of Composite Materials by Second-Order Property of Mosaic Patterns, 36:11
- Failure Investigation of Polymer and Composite Material Structures in the Mechanical Engineering Industry, 37:309

Copper Alloys

- Influence of Microstructural Parameters on Strain Localization in Uniaxial Tension, 36:159
- Metallography of Ancient Bronzes: Study of Pre-Roman Metal Technology in the Iberian Peninsula, 37:335

Corrosion

Studying Localized Corrosion in Stainless Steels with Surface-Sensitive Methods, 37:279 Transmission Electron Microscopic Investigation of Hot-Salt Cracking in Titanium Alloys, 37:39

Crystallography

Characterization of Domain Boundaries in Ni₄Mo by Convergent Beam Electron Diffraction, 36:73

Damascus Steel

Wootz Damascus Steel Blades, 37:9

Diffusion Phenomena

Simulation of Chromized Coating Processing and Microstructure, 36:35

Dispersion Hardening NONE

...

Editorials 36:1

Electro-Deposition (all types)

Simulation of Chromized Coating Processing and Microstructure, 36:35

Electroless Deposition (all types)

Properties of Electroless Ni-W-P Amorphous Alloys, 37:119

Electron Microscopy (all types)

- Characterization of Domain Boundaries in Ni₄Mo by Convergent Beam Electron Diffraction, 36:73
- Discontinuous Precipitation in a Zn-1.6 wt.% Al Alloy, 37:123
- Evolution of Grain Boundary Structure in Submicrometer-Grained Al-Mg Alloy, 37:285
- Hydride-Dehydride Conversion of Solid Ti6Al4V to Powder Form, 37:53
- Influence of Si Content on Microstructure of TiAl Alloys, 37:371
- Long Period-Structure of Spin-Cast FeBSi₂, 36:43
- A Metallographic and Fractographic Study of the Origin of Cleavage Fracture in Mild Steel, 36:27
- Metallographic Preparation of Soft Materials: Lead Alloys, 37:243
- Microstructural Characterization of High-Carbon Ferrochromium, 37:349
- Microstructural Examination of Layered Coatings by Scanning Electron Microscopy, Transmission Electron Microscopy, And Atomic Force Microscopy, 37:213
- Microstructure Characteristics of a Rapidly Solidified Al-Si-Ti-Pb Alloy, 37:95
- Microstructures of Rapidly Solidified Powder and Extruded Rod of Ni₃Ge, 37:23
- Morphological and Analytical Characterization of Inclusions: Relation with Processing Parameters and Properties of Use, 37:321

Morphologies of the Transition Region in Dissimilar Austenitic-Ferritic Welds, 36:5

Nanostructural Materials Formation by Mechanical Alloying: Morphologic Analysis Based on Transmission and Scanning Electron Microscopic Observations, 36:185

A New Preparation Method for Cross-Sectional TEM Specimens, 37:365

Observation of Nanoscale Hexagonal Close-Packed Cobalt inside Tungsten Carbide in Consolidated Spray-Converted Nanocomposite WC-Co by Diffractogram Analysis of High-Resolution Electron Microscopy Images, 37:161

Preparation, Transmission Electron Microscopy, and Microanalytical Investigations of Metal-III-V Semiconductor Interfaces, 37:143

Recovery and Recrystallization Characterization in Ferritic Stainless Steel by Using Electron Channeling Contrast, 37:31

Scanning Electron Microscope Fractography in Failure Analysis of Steels, 37:357

Secondary Processing of Electron Backscatter Data from an Aluminum Alloy, 37:131

TEM Study of the Microstructure of HSLA100 Steel, 37:169

Transmission Electron Microscopic Investigation of Hot-Salt Cracking in Titanium Alloys, 37:39

Equal Channel Angular Processing

Bulk Ultrahigh-Modulus Polyethylene, 37:301 Ceramics Superplasticity: Deformation Mechanisms and Microstructures, 37:331

The Equal Channel Angular Extrusion Process for Materials Processing, 37:295

Evolution of Grain Boundary Structure in Submicrometer-Grained Al-Mg Alloy, 37:285

High-Strength, High-Conductivity Copper-Steel Composite, 37:239

Micro- and Macrodefects in Thin Sheet Twin-Roll Cast Aluminum Alloys, 37:301

Microstructural Characteristics of an Ultrafine Grain Metal Processed with Equal-Channel Angular Pressing, 37:277

Novel Deformation Processes and Microstructures Involving Ballistic Penetrator Formation and Hypervelocity Impact and Penetration Phenomena, 37:245

Processes of Microstructural Evolution during Superplastic Deformation, 37:311

Extraction Techniques

Review of the Techniques for Extraction of Second-Phase Particles from Aluminum Alloys, 37:61

Failure Analysis

Comparison of the Fractographic Features of a Carburized Steel Fractured Under Monotonic or Cyclic Loading, 36:153

Failure Investigation of Polymer and Composite Material Structures in the Mechanical Engineering Industry, 37:309 Metallography in Life Assessment of Power Plants, 36:175

Scanning Electron Microscope Fractography in Failure Analysis of Steels, 37:357

Field Metallography

Metallography in Life Assessment of Power Plants, 36:175

Fractography

Comparison of the Fractographic Features of a Carburized Steel Fractured Under Monotonic or Cyclic Loading, 36:153

Intergranular Fracture of Low-Alloy Cast Steel, 36:65 A Metallographic and Fractographic Study of the Origin of Cleavage Fracture in Mild Steel, 36:27 Three-Dimensional Reconstruction of Fracture Surfaces, 37:379

Fracture Theory/Crack Tips

Plastic Zone Size Measurement Techniques for Metallic Materials, 37:105

Heat Treating

Microstructure Analysis of Nodular Iron 400-12 After Laser Surface Melt Hardening, 37:81 Thermoelectric Power Characterization of a 2024 Aluminum Alloy During Solution Treatment and Aging, 36:83

Image Analysis

Grain Sizing of Anodized Aluminum by Color Image Analysis, 36:203

Image Processing for Particle Characterization, 36:165New Developments in Data Processing of Noisy Images, 37:327

Three-Dimensional Reconstruction of Fracture Surfaces, 37:379

Inclusions/Second Phase Particles

Daily Routine Quantitative Assessment of Microstructure of Steel by Image Analysis, 36:191 Microstructural Characterization of High-Carbon Ferrochromium, 37:349

Microstructure of Second-Phase Particles in High-Temperature Ti-55 Alloy after Creep, 37:183

Morphological and Analytical Characterization of Inclusions: Relation with Processing Parameters and Properties of Use, 37:321

Review of the Techniques for Extraction of Second-Phase Particles from Aluminum Alloys, 37:61

Intermetallics

Characterization of Domain Boundaries in Ni₄Mo by Convergent Beam Electron Diffraction, 36:73 Microstructures of Rapidly Solidified Powder and Extruded Rod of Ni3Ge, 37:23

Iron & Iron-Base Alloys

Influence of Microstructural Parameters on Strain Localization in Uniaxial Tension, 36:159

- Microstructure Analysis of Nodular Iron 400-12 After Laser Surface Melt Hardening, 37:81 Thermomechanical Training Behavior and Its Dynamic Mechanical Analysis in an Fe-Mn-Si Shape Memory Alloy, 37:227
- Lead-Tin Alloys
 - Metallographic Preparation of Soft Materials: Lead Alloys, 37:243
- Life Assessment
 - Metallography in Life Assessment of Power Plants, 36:175
 - Processes of Microstructural Evolution during Superplastic Deformation, 37:311
- Mechanical Alloying
 - Nanostructural Materials Formation by Mechanical Alloying: Morphologic Analysis Based on Transmission and Scanning Electron Microscopic Observations, 36:185
- Mechanical Behavior: Creep, Fatigue, Fracture, Superplasticity
 - Comparison of the Fractographic Features of a Carburized Steel Fractured Under Monotonic or Cyclic Loading, 36:153
 - High-Strength, High-Conductivity Copper-Steel Composite, 37:239
 - Influence of Microstructural Parameters on Strain Localization in Uniaxial Tension, 36:159
 - Intergranular Fracture of Low-Alloy Cast Steel, 36:65 Microstructure of Second-Phase Particles in High-
 - Temperature Ti-55 Alloy after Creep, 37:183 Plastic Zone Size Measurement Techniques for Metallic Materials, 37:105
 - Processes of Microstructural Evolution during Superplastic Deformation, 37:311
 - Stress-Strain Characteristics of the Heat-Affected Zone in an Hy-100 Weldment as Determined by Microindentation Testing, 37:195
 - Thermomechanical Training Behavior and Its Dynamic Mechanical Analysis in an Fe-Mn-Si Shape Memory Alloy, 37:227
- Metallic Oxides & Glasses
 - Image Processing for Particle Characterization, 36: 165
 - The Phase Stability of Zn₂Ti₃O₈, 37:153
- Metallographic Preparation/Techniques
 - Metallographic Preparation of Soft Materials: Lead Alloys, 37:243
 - A Metallographic Technique for Detecting Martensite-Austenite Constituents in the Weld Heat-Affected Zone of a Micro-alloyed Steel, 37: 89
 - A New Preparation Method for Cross-Sectional TEM Specimens, 37:365
 - Studying Localized Corrosion in Stainless Steels with Surface-Sensitive Methods, 37:279

- Microindentation Hardness
 - Comparison Between Constant Force and Constant Rate of Feed in Materialographic Cut-Off Machines: Surface Quality in Relation to Cutting Speed, Force, and Rate of Feed, 37:225
 - Stress-Strain Characteristics of the Heat-Affected Zone in an Hy-100 Weldment as Determined by Microindentation Testing, 37:195
- Microscopy
 - A Bibliography of Books Relating to Materials Microscopy, 37:105
 - Microstructural Characterization of High-Carbon Ferrochromium, 37:349
 - Recovery and Recrystallization Characterization in Ferritic Stainless Steel by Using Electron Channeling Contrast, 37:31
- Microstructural Characterization: CerMets
- Observation of Nanoscale Hexagonal Close-Packed Cobalt inside Tungsten Carbide in Consolidated Spray-Converted Nanocomposite WC-Co by Diffractogram Analysis of High-Resolution Electron Microscopy Images, 37:161
- Microstructural Characterization: Intermetallics Microstructures of Rapidly Solidified Powder and
- Extruded Rod of Ni₃Ge, 37:23
- Microstructural Characterization: Metals
 - Evolution of Grain Boundary Structure in Submicrometer-Grained Al-Mg Alloy, 37:285
 - Influence of Si Content on Microstructure of TiAl Alloys, 37:371
 - Microstructural Characterization of High-Carbon Ferrochromium, 37:349
- Microstructural Characterization: Using Color
 - Metallography of Ancient Bronzes: Study of Pre-Roman Metal Technology in the Iberian Peninsula, 37:335
 - Microstructural Manifestations in Color: Some Applications for Steels, 37:1
- Modeling
 - Analysis of Internal Structures of Composite Materials by Second-Order Property of Mosaic Patterns, 36:11
 - Characterization of the Degree of Regularity of Two-Dimensional Random Quasi-Lattice Structures, 36:93
 - Comparative Analysis of the Size Distributions of Linear, Planar, and Spatial Poisson Voronoi Cells, 36:53
- Nano Grained Materials
 - Evolution of Grain Boundary Structure in Submicrometer-Grained Al-Mg Alloy, 37:285

Nano Materials

Microstructural Characteristics of an Ultrafine Grain Metal Processed with Equal-Channel Angular Pressing, 37:277

Nanostructural Materials Formation by Mechanical Alloying: Morphologic Analysis Based on Transmission and Scanning Electron Microscopic Observations, 36:185

Observation of Nanoscale Hexagonal Close-Packed Cobalt inside Tungsten Carbide in Consolidated Spray-Converted Nanocomposite WC-Co by Diffractogram Analysis of High-Resolution Electron Microscopy Images, 37:161

Nickel Alloys

Characterization of Domain Boundaries in Ni₄Mo by Convergent Beam Electron Diffraction, 36:73 Properties of Electroless Ni-W-P Amorphous Alloys, 37:119

Non-Metallic Inclusions

Intergranular Fracture of Low-Alloy Cast Steel, 36:65

Organic Materials/Polymers

Failure Investigation of Polymer and Composite Material Structures in the Mechanical Engineering Industry, 37:309

Oxidation, Corrosion, Environmental Interactions

Observations on the Influence of Cleaners on Material Corrosion in the Food Industry, 37:187 Processes of Microstructural Evolution during Superplastic Deformation, 37:311

Phase Diagrams/Stability
The Phase Stability of Zn₂Ti₃O₈, 37:153

Phase Identification

A Metallographic Technique for Detecting Martensite-Austenite Constituents in the Weld Heat-Affected Zone of a Micro-alloyed Steel, 37:89

Phase Transformations

Discontinuous Precipitation in a Zn-1.6 wt.% Al Alloy, 37:123

Powder Metallurgy

Hydride-Dehydride Conversion of Solid Ti6Al4V to Powder Form, 37:53

Preparation Techniques

Assessment of Material Thermal History in Elevated Temperature Components, 37:271

Comparison Between Constant Force and Constant Rate of Feed in Materialographic Cut-Off Machines: Surface Quality in Relation to Cutting Speed, Force, and Rate of Feed, 37:225

Preparation of Soft Solder Joints, 37:235

Preparation, Transmission Electron Microscopy, and Microanalytical Investigations of Metal-III-V Semiconductor Interfaces, 37:143 Quantitative Metallography

Daily Routine Quantitative Assessment of Microstructure of Steel by Image Analysis, 36:191 Grain Sizing of Anodized Aluminum by Color Image Analysis, 36:203

Image Processing for Particle Characterization, 36:165
Microstructural Examination of Layered Coatings
by Scanning Electron Microscopy, Transmission
Electron Microscopy, And Atomic Force
Microscopy, 37:213

Quantification of Particle Morphologies in View of Quality Control of the Thermal Spray Process, 37: 257

Radiation Effects

Metallographic Assessment of the Thermal Exposure to the Three Mile Island Unit 2 Reactor Lower Head, 37:291

Rapid Solidification

Microstructure Analysis of Nodular Iron 400-12 After Laser Surface Melt Hardening, 37:81 Microstructure Characteristics of a Rapidly Solidified Al-Si-Ti-Pb Alloy, 37:95

Recrystallization

Recovery and Recrystallization Characterization in Ferritic Stainless Steel by Using Electron Channeling Contrast, 37:31

Semiconductors/Magnetic Film

A New Preparation Method for Cross-Sectional TEM Specimens, 37:365

Preparation, Transmission Electron Microscopy, and Microanalytical Investigations of Metal-III-V Semiconductor Interfaces, 37:143

Shape Memory: Alloys, Effect

Thermomechanical Training Behavior and Its Dynamic Mechanical Analysis in an Fe-Mn-Si Shape Memory Alloy, 37:227

Solder Joints

Comparison Between Constant Force and Constant Rate of Feed in Materialographic Cut-Off Machines: Surface Quality in Relation to Cutting Speed, Force, and Rate of Feed, 37:225 Preparation of Soft Solder Joints, 37:235

Statistical Analysis

Characterization of the Degree of Regularity of Two-Dimensional Random Quasi-Lattice Structures, 36:93

Morphological and Analytical Characterization of Inclusions: Relation with Processing Parameters and Properties of Use, 37:321

Steels

Comparison of the Fractographic Features of a Carburized Steel Fractured Under Monotonic or Cyclic Loading, 36:153

- Daily Routine Quantitative Assessment of Microstructure of Steel by Image Analysis, 36:191
- A Metallographic and Fractographic Study of the Origin of Cleavage Fracture in Mild Steel, 36:27
- A Metallographic Technique for Detecting Martensite-Austenite Constituents in the Weld Heat-Affected Zone of a Micro-alloyed Steel, 37: 89
- Microstructural Manifestations in Color: Some Applications for Steels, 37:1
- Morphological and Analytical Characterization of Inclusions: Relation with Processing Parameters and Properties of Use, 37:321
- Morphologies of the Transition Region in Dissimilar Austenitic-Ferritic Welds, 36:5
- Observations on the Influence of Cleaners on Material Corrosion in the Food Industry, 37:187
- Plastic Zone Size Measurement Techniques for Metallic Materials, 37:105
- Recovery and Recrystallization Characterization in Ferritic Stainless Steel by Using Electron Channeling Contrast, 37:31
- Scanning Electron Microscope Fractography in Failure Analysis of Steels, 37:357
- Stress-Strain Characteristics of the Heat-Affected Zone in an Hy-100 Weldment as Determined by Microindentation Testing, 37:195
- Studying Localized Corrosion in Stainless Steels with Surface-Sensitive Methods, 37:279
- TEM Study of the Microstructure of HSLA100 Steel, 37:169

Surface Hardening

Microstructure Analysis of Nodular Iron 400-12 After Laser Surface Melt Hardening, 37:81

Texture/Orientation

Secondary Processing of Electron Backscatter Data from an Aluminum Alloy, 37:131

Thermal History

- Assessment of Material Thermal History in Elevated Temperature Components, 37:271
- Metallographic Assessment of the Thermal Exposure to the Three Mile Island Unit 2 Reactor Lower Head, 37:291

Titanium Alloys

- Hydride-Dehydride Conversion of Solid Ti6Al4V to Powder Form, 37:53
- Influence of Si Content on Microstructure of TiAl Alloys, 37:371
- Microstructure of Second-Phase Particles in High-Temperature Ti-55 Alloy after Creep, 37:183
- Transmission Electron Microscopic Investigation of Hot-Salt Cracking in Titanium Alloys, 37:39

Welding, Joining

- Morphologies of the Transition Region in Dissimilar Austenitic-Ferritic Welds, 36:5
- Stress-Strain Characteristics of the Heat-Affected Zone in an Hy-100 Weldment as Determined by Microindentation Testing, 37:195

X-Ray Diffraction

Microstructures of Rapidly Solidified Powder and Extruded Rod of Ni₃Ge, 37:23

Zinc Alloys

Discontinuous Precipitation in a Zn-1.6 wt.% Al Alloy, 37:123

